

Interlayer Insulation Film Used For Multilayer interconnect of Semiconductor Integrated Circuit And Method Of Manufacturing The Same

Abstract of the Disclosure

[0086] An interlayer insulation film for multilayer interconnect of a semiconductor integrated circuit is formed by forming a first insulation film on a substrate by plasma CVD using a silicon-containing hydrocarbon gas; and continuously forming a second insulation film on the first insulation film at a thickness less than the first insulation film *in situ* by plasma CVD using a silicon-containing hydrocarbon gas and an oxidizing gas. The second insulation film has a hardness of 6 GPa or higher and is used as a polishing stop layer.

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